

[illegible]

Page 1



Abstract


Abstract

[illegible][illegible]

Customer:



Date:

100	HAAS CNC VERTICAL MACHINING #1	0.00	20	✓
 HAAS I HAAS CNC vertical machine #1	Memo 1- Machine as per Folio FA079 <input type="checkbox"/> 2- Tumble & Deburr	0.00 <i>JP 10/02/20 / ms 10/07/23</i>		

0.00

Memo

0.00

0.00
0.00

20 ~~4~~

0.00

Memo

0.00

0.00 28 10/07/26

20 ~~0~~

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 60271

Thursday, July 01, 2010 8:29:37 AM



Page 2

Item ID:	D2940-1	Accept		Setup	Start	
Revision ID:					Stop	
Item Name:	Support					
Start Date:	7/1/2010	Start Qty:	20.00			
Required Date:	7/8/2010	Req'd Qty:	20.00			
Reference:						
				Cust Item ID:		
				Customer:		

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	
	QC:	Date:	SPC (Y/N):	Date:		Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 	White Gloss(Ref:4.3.5.2) per QSI005 4.3-Steel	0.00							
	<i>M114841</i>								
	Powdercoat	0.00							
	Powder Coating								
	Memo								
	*****Mask Inside Surface as per Dwg D2940***** <input type="checkbox"/> START								
	TIME: <i>7:50</i> <input type="checkbox"/> OVEN TEMPERATURE:								
	<i>7:00</i> <input type="checkbox"/> FINISH TIME: <i>8:20</i>								
140 	QC3- Inspect Part Finish	0.00							
	QC	0.00							
	Quality Control								
	Memo								
150 	SprayPaint	0.00							
	SprayPaint	0.00							
	Spray Painting								
	Memo								
	Prime inside surface as per Dwg D2940 and QSI 005 4.3.								

20 *10-7-27*

20 *10/07/27*

20 *10-08-19*

(P40)

W/O: 60271		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
10-08-23	150	mask exterior powder coat finish on support to prevent over spray	AT	10-08-23	20		

Part No: D2940-1 PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 60271

Thursday, July 01, 2010 8:29:37 AM



Page 3

Item ID: D2940-1

Accept



Setup Start



Revision ID:

Stop



Item Name: Support

Start Date: 7/1/2010 Start Qty: 20.00



Cust Item ID:

Required Date: 7/8/2010 Req'd Qty: 20.00



Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

160 QC14- Inspect Spray Paint

0.00



QC Memo

0.00

Quality Control

M 10 08 24 (20)

170 Identify as per dwg & Stock Location: *X tube*

0.00



Packaging Memo

0.00

Packaging

finishing

BT 10 08 24 (20)

180 QC21- Final Inspection - Work Order Release

0.00



QC Memo

0.00

Quality Control

10/08/24

C21018/24

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Thursday, July 01, 2010 8:29:40 AM

Page 1

Work Order ID: 60271



Parent Item: D2940-1



Parent Item Name: Support


Start Date: 7/1/2010

Required Date: 7/8/2010

Start Qty: 20.00

Required Qty: 20.00

Comments: IPP C 02.11.26 Reformat; Added P/O KJ
IPP Rev:D Added priming as per Rev B 07-04-30 JLM
IPP E 08.03.19 Re-format Ec verified by DD
IPP Rev:F 08-10-22 add qc14 DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
DSK081 		Manufactured	No			110	Each	14.0000	0.5	10			
D2940-1 TURNING DETAIL													

Location	Loc Qty	Loc Code
DSK081	10	
57442	10	
MAT	4	
47786	4	

SIP 10/07/20

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order:	60271
Description: Ø3.250 Support		Part Number:	D2940-1
Inspection Dwg: D2940	Rev: B	Page 1 of 1	

FIRST ARTICLE INSPECTION DIMENSION SHEET

☒ First Article ☐ Prototype

				Record Actual Dimensions				
Dim	Min	Max	Go/No Go Gauge	1	2	3	4	5
HAAS Section								
AA	0.240	0.260		0.250	0.250	0.250	0.250	0.250
AB	0.490	0.510		0.500	0.500	0.500	0.500	0.500
AC	0.140	0.160		0.153	0.155	0.150	0.150	0.156
AD	3.510	3.530		3.510	3.510	3.510	3.510	3.511
AE	1.633	1.673		1.653	1.653	1.656	1.655	1.653
AF	1.493	1.513		1.505	1.495	1.500	1.507	1.500
AG	0.040	0.060		0.054	0.045	0.049	0.055	0.055
AH	0.188	0.193		0.191	0.191	0.190	0.190	0.191
AI	0.140	0.160		0.147	0.146	0.146	0.147	0.150
AJ	2.518	2.538		2.520	2.520	2.520	2.520	2.525
AK	0.040	0.060		0.050	0.050	0.050	0.050	0.051
AL	0.010	0.020		0.015	0.015	0.015	0.015	0.015
AM	0.140	0.160		0.156	0.158	0.150	0.153	0.160
AN	0.350	0.450		0.385	0.385	0.380	0.380	0.400
AO	0.240	0.260		0.250	0.250	0.250	0.250	0.250
AP	0.150	0.170		0.150	0.160	0.155	0.148	0.158
AQ	0.053	0.073		0.063	0.063	0.063	0.063	0.060
AR	101.64	105.64		103.64	103.64	103.64	103.64	103.64
AS	0.260	0.267		0.262	0.262	0.264	0.264	0.263
AT	0.053	0.073		0.063	0.063	0.063	0.063	0.063
AU	4.118	4.138		4.130	4.130	4.130	4.130	4.130
AV								
AW								
Accept/Reject								

Measured by:	DJP / MNA	Date:	10/07/21 / 10/07/23
Audited by:	LF	Date:	10/07/26
Prototype Approval:		Date:	

Rev	Date	Change	Revised by	Approved
A	02.12.12	New Issue	KJ/RF	
B	07.05.08	Dwg Rev. updated	KJ/JLM	
C	07.07.18	Dimension AS revised	KJ/JLM	
D	08.04.22	Reformat	KJ/JLM	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order:	6027
Description: Ø3.250 Support		Part Number:	D2940-1
Inspection Dwg: D2940	Rev: B	Page 1 of 1	

FIRST ARTICLE INSPECTION DIMENSION SHEET

☒ First Article ☐ Prototype

				Record Actual Dimensions				
Dim	Min	Max	Go/No Go Gauge	6	7	8	9	10
HAAS Section								
AA	0.240	0.260		.250	.250	.250	.250	.250
AB	0.490	0.510		.500	.500	.500	.500	.500
AC	0.140	0.160		.157	.157	.158	.154	.157
AD	3.510	3.530		3.512	3.514	3.513	3.513	3.512
AE	1.633	1.673		1.661	1.656	1.657	1.656	1.656
AF	1.493	1.513		1.499	1.506	1.503	1.504	1.504
AG	0.040	0.060		.051	.053	.052	.051	.052
AH	0.188	0.193		.190	.190	.190	.190	.190
AI	0.140	0.160		.148	.147	.147	.147	.148
AJ	2.518	2.538		2.522	2.519	2.520	2.517	2.520
AK	0.040	0.060		.050	.049	.050	.049	.050
AL	0.010	0.020		.015	.015	.015	.015	.015
AM	0.140	0.160		.156	.151	.151	.158	.157
AN	0.350	0.450		.440	.440	.440	.440	.440
AO	0.240	0.260		.250	.250	.250	.250	.250
AP	0.150	0.170		.150	.150	.153	.150	.150
AQ	0.053	0.073		.063	.063	.063	.063	.063
AR	101.64	105.64		103.64	103.64	103.64	103.64	103.64
AS	0.260	0.267		.260	.262	.261	.260	.261
AT	0.053	0.073		.063	.063	.063	.063	.063
AU	4.118	4.138		4.133	4.132	4.130	4.130	4.130
AV								
AW								
Accept/Reject								

Measured by:	me	Date:	10/07/23
Audited by:	ST	Date:	10/07/26
Prototype Approval:		Date:	

Rev	Date	Change	Revised by	Approved
A	02.12.12	New Issue	KJ/RF	
B	07.05.08	Dwg Rev. updated	KJ/JLM	
C	07.07.18	Dimension AS revised	KJ/JLM	
D	08.04.22	Reformat	KJ/JLM	

DART AEROSPACE LTD		Work Order:	60271
Description: Ø3.250 Support		Part Number:	D2940-1
Inspection Dwg: D2940	Rev: B	Page 1 of 1	

FIRST ARTICLE INSPECTION DIMENSION SHEET

☒ First Article ☐ Prototype

				Record Actual Dimensions				
Dim	Min	Max	Go/No Go Gauge	11	12	13	14	15
HAAS Section								
AA	0.240	0.260	0.250	0.250	0.250	0.250	0.250	0.250
AB	0.490	0.510	0.500	0.500	0.500	0.500	0.500	0.500
AC	0.140	0.160		0.155	0.155	0.155	0.155	0.150
AD	3.510	3.530		3.510	3.510	3.510	3.510	3.510
AE	1.633	1.673		1.652	1.653	1.656	1.655	1.654
AF	1.493	1.513		1.500	1.506	1.506	1.504	1.506
AG	0.040	0.060		0.047	0.054	0.053	0.053	0.054
AH	0.188	0.193		0.191	0.191	0.190	0.190	0.190
AI	0.140	0.160		0.149	0.145	0.146	0.148	0.146
AJ	2.518	2.538		2.525	2.528	2.520	2.520	2.525
AK	0.040	0.060		0.050	0.050	0.050	0.050	0.050
AL	0.010	0.020		0.015	0.015	0.015	0.015	0.015
AM	0.140	0.160		0.150	0.155	0.154	0.150	0.155
AN	0.350	0.450		0.380	0.380	0.385	0.385	0.380
AO	0.240	0.260		0.250	0.250	0.250	0.250	0.250
AP	0.150	0.170		0.152	0.150	0.149	0.150	0.148
AQ	0.053	0.073		0.063	0.063	0.063	0.063	0.063
AR	101.64	105.64		103.64	103.64	103.64	103.64	103.64
AS	0.260	0.267		0.261	0.261	0.262	0.262	0.262
AT	0.053	0.073		0.063	0.063	0.063	0.063	0.063
AU	4.118	4.138		4.132	4.132	4.132	4.132	4.130
AV								
AW								
Accept/Reject								

Measured by:	DTT	Date:	10/07/24
Audited by:	BD	Date:	10/07/26
Prototype Approval:		Date:	

Rev	Date	Change	Revised by	Approved
A	02.12.12	New Issue	KJ/RF	
B	07.05.08	Dwg Rev. updated	KJ/JLM	
C	07.07.18	Dimension AS revised	KJ/JLM	
D	08.04.22	Reformat	KJ/JLM	

DART AEROSPACE LTD		Work Order:	60271
Description: Ø3.250 Support		Part Number:	D2940-1
Inspection Dwg: D2940	Rev: B	Page 1 of 1	

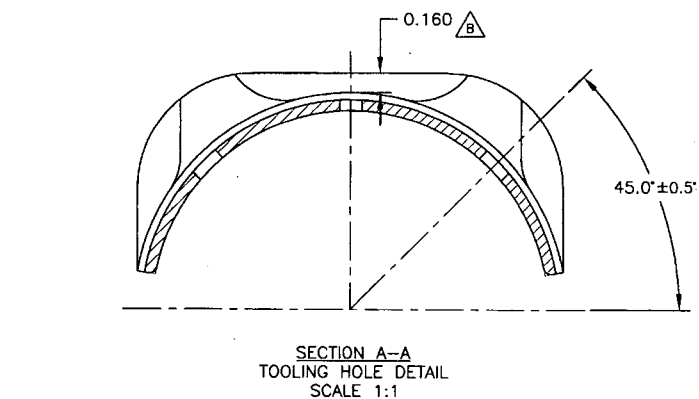
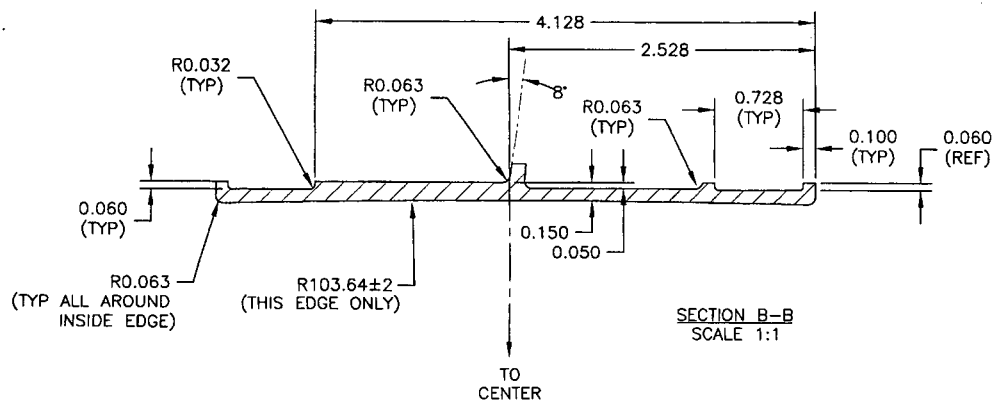
FIRST ARTICLE INSPECTION DIMENSION SHEET

☒ First Article ☐ Prototype

				Record Actual Dimensions				
Dim	Min	Max	Go/No Go Gauge	16	17	18	19	20
HAAS Section								
AA	0.240	0.260		0.250	0.250	0.250	0.250	0.250
AB	0.490	0.510		0.500	0.500	0.500	0.500	0.500
AC	0.140	0.160		0.150	0.153	0.150	0.152	0.150
AD	3.510	3.530		3.510	3.510	3.510	3.510	3.510
AE	1.633	1.673		1.652	1.654	1.655	1.651	1.6535
AF	1.493	1.513		1.503	1.507	1.503	1.502	1.5065
AG	0.040	0.060		0.049	0.055	0.051	0.051	0.053
AH	0.188	0.193		0.190	0.190	0.190	0.190	0.190
AI	0.140	0.160		0.150	0.146	0.148	0.146	0.148
AJ	2.518	2.538		2.525	2.530	2.530	2.530	2.530
AK	0.040	0.060		0.050	0.050	0.050	0.050	0.050
AL	0.010	0.020		0.015	0.015	0.015	0.015	0.015
AM	0.140	0.160		0.155	0.150	0.148	0.150	0.153
AN	0.350	0.450		0.380	0.380	0.380	0.380	0.380
AO	0.240	0.260		0.250	0.250	0.250	0.250	0.250
AP	0.150	0.170		0.153	0.150	0.151	0.149	0.147
AQ	0.053	0.073		0.063	0.063	0.063	0.063	0.063
AR	101.64	105.64		103.64	103.64	103.64	103.64	103.64
AS	0.260	0.267		0.262	0.262	0.262	0.262	0.262
AT	0.053	0.073		0.063	0.063	0.063	0.063	0.063
AU	4.118	4.138		4.130	4.130	4.129	4.132	4.132
AV								
AW								
Accept/Reject								

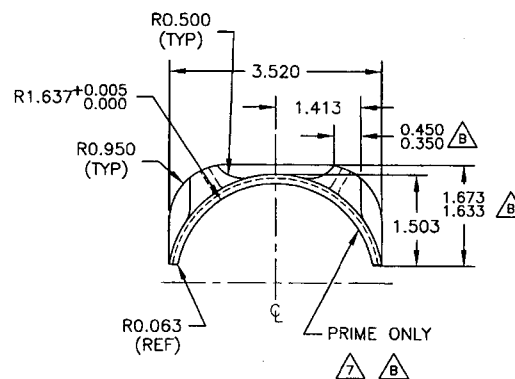
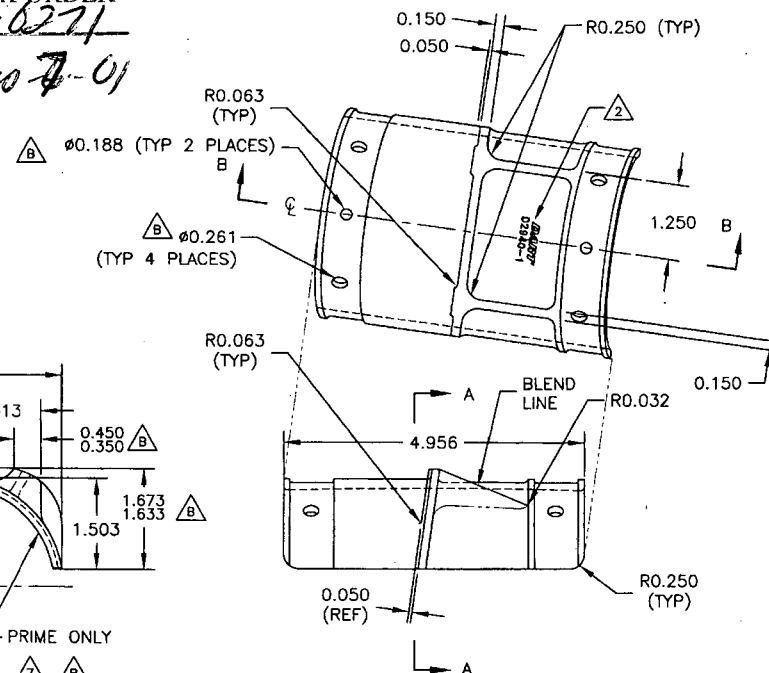
Measured by:	DSH	Date:	10/07/05
Audited by:	SA	Date:	10/07/21
Prototype Approval:		Date:	

Rev	Date	Change	Revised by	Approved
A	02.12.12	New Issue	KJ/RF	
B	07.05.08	Dwg Rev. updated	KJ/JLM	
C	07.07.18	Dimension AS revised	KJ/JLM	
D	08.04.22	Reformat	KJ/JLM	



SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 60271
PS 107-01

RELEASED
07.04.24
PER ENR 87



D2940-1

- 1) MATERIAL: 17-4 PH STAINLESS STEEL
HEAT TREAT TO H900 CONDITION
(900°F FOR 1 HR, AIR COOL)
MIN UTS = 170 KSI (38 HRC)
- 2) IDENTIFY WITH DART LOGO AND PART NUMBER IN THIS AREA
WITH 0.125 HIGH LETTERING 0.010-0.020 DEEP
- 3) BREAK ALL UNMARKED SHARP EDGES 0.010 TO 0.020
- 4) PART IS SYMMETRIC ABOUT CENTERLINE
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES
- 7) FINISH: POWDER COAT WHITE (REF 4.3.5.2) PER DART QSI 005 4.3
PRIME INSIDE SURFACE AS SHOWN PER DART QSI 005 4.2

COPYRIGHT © 2001 BY DART AEROSPACE LTD.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL
AND IS SUPPLIED ON THE EXPRESS CONDITION
THAT IT IS NOT TO BE USED FOR ANY PURPOSE
OR COPIED OR COMMUNICATED TO ANY OTHER
PERSON WITHOUT WRITTEN PERMISSION FROM
DART AEROSPACE LTD.

B	07.03.16	UPDATE PER NCR 642, PRIME INSIDE
A	01.01.10	NEW ISSUE
DESIGN	DRAWN BY	DART DART AEROSPACE LTD. HAWKESBURY, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO. D2940
DATE	07.03.16	TITLE Ø3.250 SUPPORT
		REV. 8 SHEET 1 OF 1 SCALE 1:2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries